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193098 MLRS, MISSILE NUMBER 1100, ROUND NUMBER V-120, 13 FEBRUA--ETC(U)
FEB 80

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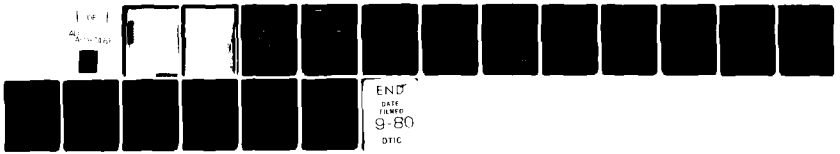

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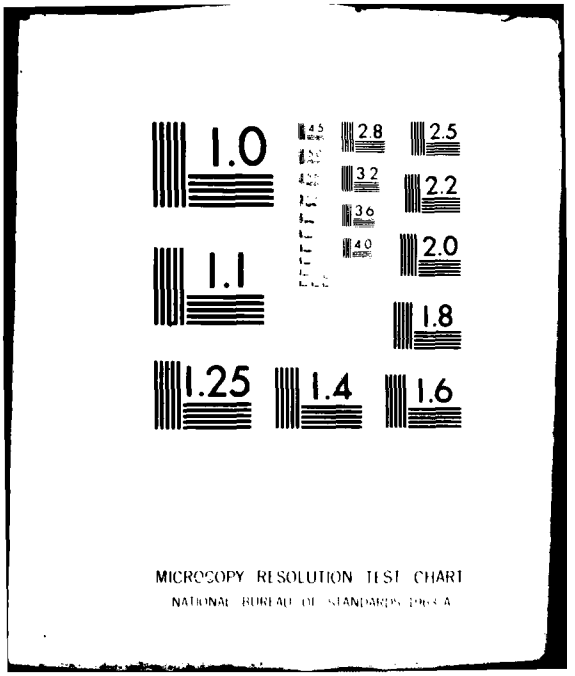
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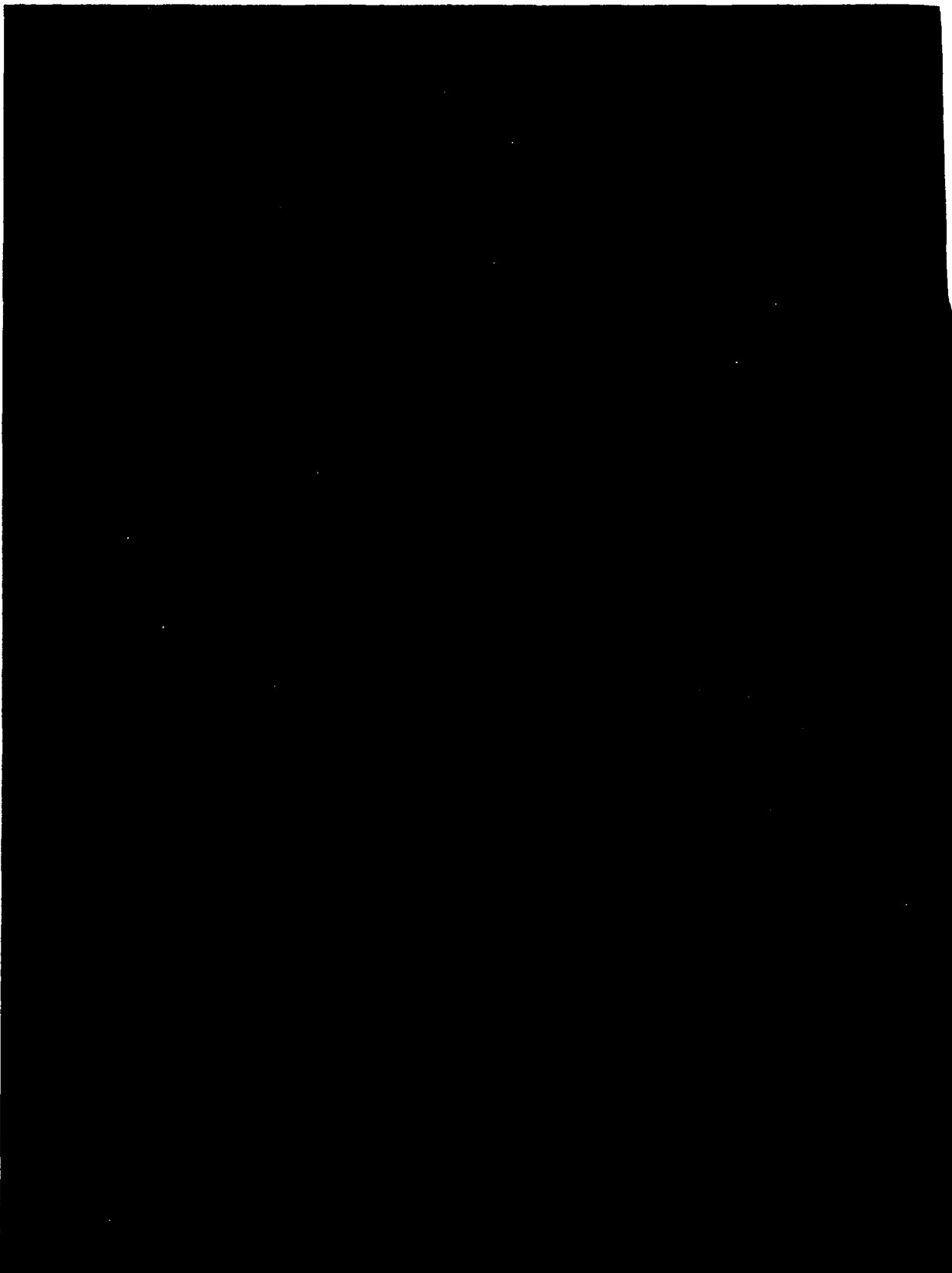

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(9) Meteorological data rept.

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Meteorological data gathered for the launching of 19309B MLRS, Missile Number 1100, Round Number V-120 are presented in tabular form.

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1 UNCLASSIFIED
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410663

CONTENTS

INTRODUCTION

193098 MLRS, Missile Number 1100, Round Number V-120, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 1515:01 MST, 13 February 1980.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature (^{o}F), relative humidity, dew point (^{o}F), wind direction and speed, and cloud cover were made at the "C" Station Met Site.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE
NICK 2km
LC-39 2km

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME
LC-37 1400 MST
LC-37 1600 MST

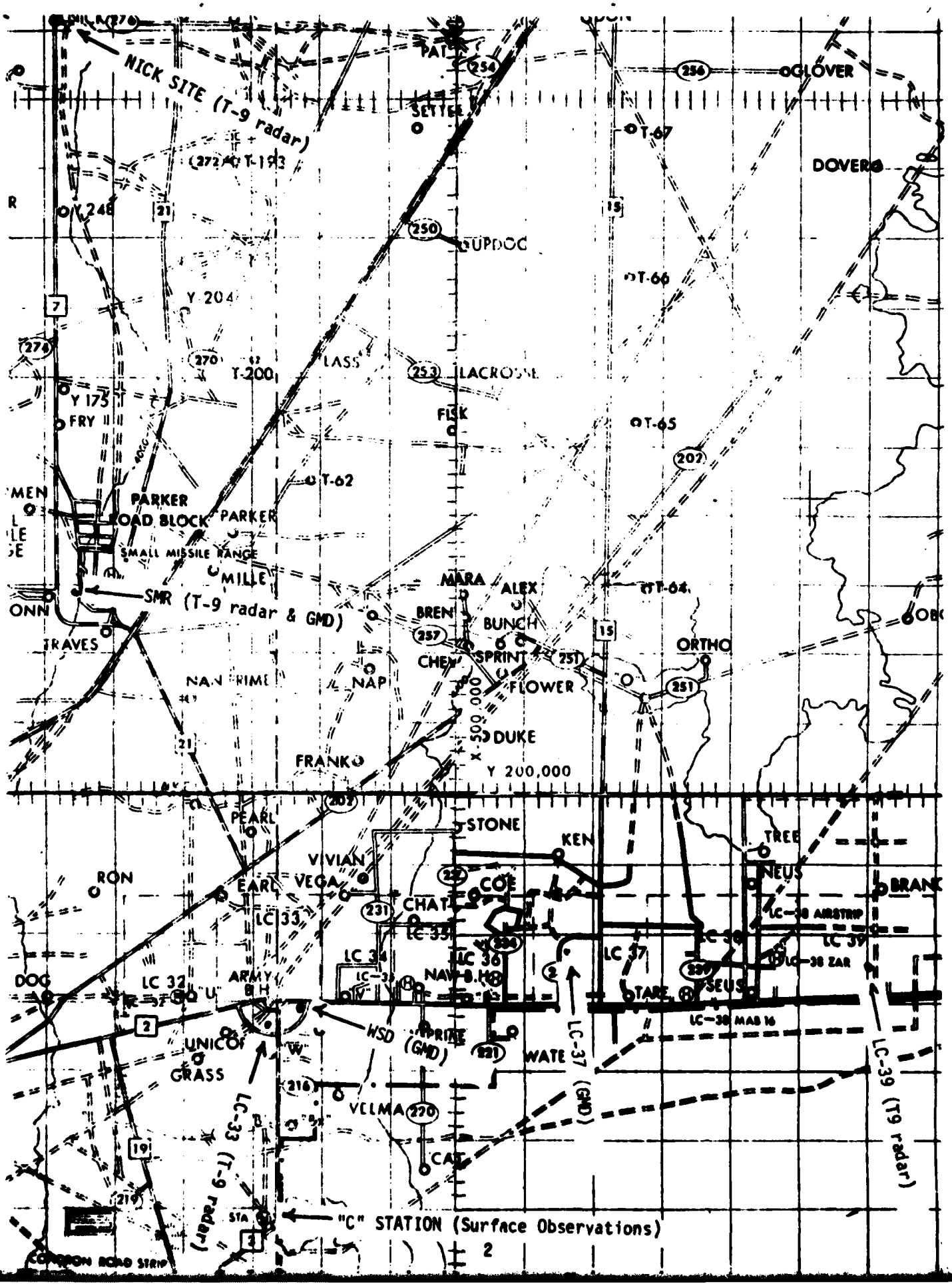
NICK SITE (T-9 radar)
SETTER
T-67
DOVER
T-193
Y 248
UPDOG
T-66
Y 204
LASS
LACROSSE
Y 175
FRY
FISK
T-65
T-200
T-62
PARKER
ROAD BLOCK
PARKER
SMALL MISSILE RANGE
MILLE
SMR (T-9 radar & GMD)
MARA
ALEX
T-64
BREN
BUNCH
TRAVES
SPRINT
ORTHO
CHEW
NAP
FLOWER
DUKE
FRANKO
Y 200,000
PEARL
STONE
KEN
TREE
VIVIAN
RON
EARL
VEGA
COE
CHAT
LC 33
LC 35
LC 34
LC 36
LC 37
LC 38
LC 39
LC-38 AIRSTRIP
LC-38 ZAR
LC-38 MAB 16
DOG
LC 32
ARMY
NAVY
TARE
SEUS
UNICOM
WSD
SPRITE (GMD)
WATE
GRASS
LC-37 (GMD)
LC-39 (T9 radar)
VELMA
LC-33 (T-9 radar)
"C" STATION (Surface Observations)
COMMON ROAD STRIP

TABLE 1

SURFACE OBSERVATIONS OBTAINED FROM "C" STATION ON 13 February 1980

TIME MST	SKY CONDITIONS	PVLG VSBY	WEATHER AND OBSTRUCTIONS TO VISION	ALTIMETER Hg	TEMP	DEW POINT	WIND DIR	WIND SPEED
0058	120SCT250SCT	20		25.950	24	29	160	10
0158	120SCTE250BKN	20		25.950	32	27	E100	06
0258	120SCT250SCT	20		25.950	34	29	010	05
0358	120SCT250SCT	20		25.930	32	25	E130	07
0458	120SCT250SCT	20		25.940	30	26	E100	03
0558	120SCTE250BKN	20		25.940	31	25	010	03
0658	60SCT120SCTE250BKN	30		25.960	32	24	020	03
0758	E60BKN120BKN250BKN	50		25.990	34	30	340	03
0858	E60BKN120BKN	50		25.995	41	33	090	04
0958	60SCTE120BKN250BKN	50		26.005	49	34	340	03
1058	120SCT250SCT	50		25.990	55	37	360	05
1158	65SCT120SCT250SCT	50		25.960	60	38	150	04
1258	65SCT120SCTE250BKN	50		25.935	60	37	270	04
1358	65SCT120SCTE250BKN	50		25.900	65	38	210	08
1458	65SCTE120BKN250BKN	50		25.885	66	36	210	08
1558	65SCTE120BKN250BKN	50		25.880	65	37	210	08
1658	65SCTE120BKN250BKN	50		25.880	62	36	200	08
1758	E120BKN250BKN	30		25.890	57	38	150	07
1858	E120BKN250BKN	20		25.905	56	37	160	06
1958	E1200VC	20		25.920	55	42	340	04
2058	E1200VC	20	L-	25.935	53	44	110	05
2158	E1200VC	20	L-	25.935	51	44	E120	05
2258	E1200VC	20		25.925	53	43	E120	05
2358	E600VC	20	RW-	25.925	52	45	150	08

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM NICK DATE 13 February 1980 TIME 1500 MST

TRACKER COORDINATES (WSTM) X= 470,734.56 Y= 255,755.64 H= 4126.57

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL X OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	200	05
90	237	04
150	209	04
210	216	06
270	165	05
330	156	08
390	160	08
500	200	07
650	183	06
800	223	06
950	245	09
1150	246	11
1350	250	11
1550	252	15
1750	249	15
2000	240	13

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM LC-39 DATE 13 February 1980 TIME 1515 MST

TRACKER COORDINATES (WSTM) X= 530,938.82 Y= 186,564.96 H= 4063.75

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL X OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	217	09
90	220	09
150	226	13
210	221	12
270	202	10
330	209	16
390	219	17
500	232	18
650	229	16
800	227	16
950	229	14
1150	246	11
1350	231	08
1550	217	08
1750	231	10
2000	249	18

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

STATION ALTITUDE 4047.27 FEET MSL
13 FEB. 80 1400 HRS MST
ASCENSION NO. 10

SIGNIFICANT LEVEL DATA
0440180010
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 4

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	R.L.HUM. PERCENT
875.4	4047.3	17.7	.4	51.0
869.0	4252.0	14.5	.7	59.0
850.0	4863.2	12.5	.5	63.0
798.2	6587.3	7.4	-1.0	65.0
756.0	8753.8	1.7	-2.6	73.0
700.0	10074.6	-2.0	-3.7	88.0
621.8	13137.9	-8.2	-8.5	98.0
612.6	13516.1	-8.9	-19.7	41.0
603.6	13887.4	-7.7	-18.1	43.0
586.2	14641.8	-9.3	-17.5	51.0
568.8	15764.5	-11.0	-24.2	39.0
544.4	16511.8	-12.7	-22.9	42.0
520.4	17636.7	-14.9	-24.7	51.0
500.0	18630.0	-17.0	-25.4	48.0
459.8	20682.9	-21.0	-31.6	37.0
438.6	21822.7	-24.2	-31.9	53.0
409.5	23454.0	-29.1	-31.6	79.0
400.0	24005.8	-29.4	-34.0	64.0
391.6	24503.4	-30.5	-36.2	57.0
385.4	24975.9	-31.6	-37.2	57.0
348.4	27196.5	-37.7	-47.7	34.0
331.0	28351.5	-40.9	-49.4	39.0
300.0	30525.2	-46.9		
266.8	33049.8	-53.0		

STATION ALTITUDE 4047.27 FEET MSL
13 FEB. 60 1400 HRS MST
ASCENSION NO. 10

UPPER AIR DATA
044016U010
LC-57

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 5

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4047.3	875.4	17.7	.4	51.0	1045.7	668.3	300.0	1.8	1.000261
4500.0	861.2	13.7	.6	40.6	1043.1	660.7	249.5	1.4	1.000262
5000.0	845.8	12.1	.2	44.0	1030.0	656.9	230.1	2.5	1.000258
5500.0	830.4	10.6	-.1	47.5	1016.7	653.2	222.6	3.7	1.000255
6000.0	815.3	9.1	-.5	50.9	1003.5	649.4	218.2	5.1	1.000252
6500.0	800.6	7.6	-1.0	54.4	990.5	645.7	215.5	6.8	1.000248
7000.0	785.8	6.3	-1.2	58.5	976.9	642.1	219.7	7.5	1.000245
7500.0	771.5	5.0	-1.5	62.6	963.4	638.6	223.7	8.2	1.000241
8000.0	757.0	3.7	-1.9	66.8	950.1	634.9	227.7	8.8	1.000238
8500.0	743.0	2.4	-2.4	70.9	937.0	631.3	233.0	10.7	1.000234
9000.0	729.2	1.0	-2.8	75.8	924.1	627.9	237.1	13.1	1.000231
9500.0	715.4	-.4	-3.2	81.5	911.4	624.2	242.7	15.2	1.000228
10000.0	702.0	-1.8	-3.6	87.2	898.9	620.6	247.2	17.3	1.000224
10500.0	688.8	-2.9	-4.4	89.4	886.3	617.3	251.7	20.3	1.000220
11000.0	675.4	-3.9	-5.1	91.0	873.7	613.8	254.9	23.5	1.000216
11500.0	662.5	-4.9	-5.9	92.7	861.3	610.3	256.0	26.1	1.000212
12000.0	649.8	-5.9	-6.7	94.3	849.2	606.8	256.8	28.3	1.000208
12500.0	637.3	-6.9	-7.4	95.9	837.2	603.3	257.5	29.6	1.000204
13000.0	625.1	-7.9	-8.2	97.5	825.4	599.8	256.1	30.7	1.000200
13500.0	613.0	-8.9	-18.9	45.7	807.4	595.6	252.9	31.2	1.000197
14000.0	601.1	-7.9	-18.0	44.2	796.9	594.7	248.3	31.2	1.000194
14500.0	589.5	-9.0	-17.6	49.5	776.6	588.5	246.5	32.1	1.000191
15000.0	578.0	-9.8	-18.3	47.2	766.0	585.4	244.6	30.8	1.000178
15500.0	566.7	-10.6	-21.0	41.8	751.3	581.5	253.6	28.5	1.000174
16000.0	555.6	-11.5	-22.4	39.9	739.3	580.3	260.0	26.3	1.000170
16500.0	544.7	-12.7	-22.1	42.0	727.9	576.0	262.7	26.6	1.000168
17000.0	533.9	-13.7	-22.3	45.9	716.2	572.8	262.0	25.8	1.000165
17500.0	523.3	-14.5	-22.7	49.9	704.7	569.6	260.3	30.9	1.000163
18000.0	512.9	-15.7	-23.7	49.9	693.4	565.3	258.3	33.0	1.000160
18500.0	502.6	-16.7	-25.0	48.4	682.4	564.0	257.0	34.0	1.000157
19000.0	492.5	-17.7	-26.5	46.0	671.3	562.8	257.3	34.4	1.000154
19500.0	482.6	-18.7	-28.6	43.3	660.3	561.6	258.9	34.8	1.000151
20000.0	472.8	-19.7	-29.6	40.7	649.5	560.4	259.4	35.1	1.000148
20500.0	463.2	-20.6	-31.2	38.0	638.9	559.2	259.7	35.5	1.000145
21000.0	453.8	-21.9	-31.4	41.5	629.0	557.8	258.3	36.1	1.000143
21500.0	444.5	-23.3	-31.1	48.5	619.5	556.9	260.3	36.6	1.000141
22000.0	435.3	-24.7	-31.3	55.8	610.3	554.1	263.1	38.0	1.000139
22500.0	426.3	-26.2	-31.0	63.8	601.2	552.3	264.3	40.3	1.000137
23000.0	417.4	-27.7	-31.2	71.8	592.3	550.4	264.1	43.7	1.000135
23500.0	408.7	-29.1	-31.4	77.7	583.2	548.7	263.0	45.8	1.000133

STATION ALTITUDE 4047.27 FEET MSL
15 FEB. 80 1400 HRS MST
ASCENSION NO. 10

UPPER AIR DATA
0440180010
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.38052 LON DEG

TABLE 5 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	400.1	-29.4	-34.0	64.2	571.6	606.3	201.8	47.5	1.000129
24500.0	391.7	-30.5	-36.2	57.0	562.1	600.9	202.3	45.6	1.000127
25000.0	383.5	-31.9	-37.4	55.8	553.5	595.1	203.1	43.9	1.000125
25500.0	375.1	-33.2	-39.3	50.8	544.5	589.5	204.0	43.2	1.000123
26000.0	367.0	-34.6	-42.1	45.9	535.8	583.8	206.2	42.8	1.000120
26500.0	359.1	-35.9	-44.3	40.9	527.2	578.1	207.8	42.9	1.000118
27000.0	351.4	-37.2	-46.7	35.9	518.7	572.5	209.0	42.6	1.000116
27500.0	343.7	-38.5	-48.1	35.3	510.4	566.7	210.6	41.9	1.000114
28000.0	336.2	-39.9	-48.5	37.5	502.1	561.0	208.6	42.4	1.000112
28500.0	328.8	-41.3	-50.4	36.3**	494.0	555.2	207.2	43.3	1.000110
29000.0	321.4	-42.7	-54.0	27.4**	485.9	549.4	205.9	44.7	1.000108
29500.0	314.2	-44.1	-58.4	18.4**	477.9	543.6	204.2	45.7	1.000107
30000.0	307.2	-45.5	-64.6	9.4**	470.0	537.9	201.7	46.3	1.000105
30500.0	300.3	-46.8	-85.6	.5**	462.3	532.1	200.4	46.2	1.000103
31000.0	293.5	-48.0			454.1	526.5	197.2	45.7	1.000101
31500.0	286.7	-49.3			446.1	520.9	195.4	43.5	1.000099
32000.0	280.1	-50.5			438.2	515.4			1.000098
32500.0	273.7	-51.7			430.5	509.8			1.000096
33000.0	267.4	-52.9			422.9	504.2			1.000094

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4047.27 FEET MSL
13 FEB. 60 1400 HRS MST
ASCENSION NO. 10

MANDATORY LEVELS
0440180010
LC-37

TABLE 6

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	4860.	12.5	.3	43.	233.6	2.2
800.0	6514.	7.6	-1.0	55.	215.7	6.8
750.0	8246.	3.0	-2.1	69.	230.1	9.5
700.0	10065.	-2.0	-3.7	68.	247.8	17.7
650.0	11987.	-5.9	-6.6	94.	256.8	26.3
600.0	14032.	-8.0	-17.9	45.	246.1	31.3
550.0	16234.	-12.1	-22.6	41.	263.2	25.5
500.0	18604.	-17.0	-25.4	46.	257.3	34.1
450.0	21173.	-22.5	-31.3	44.	256.9	36.4
400.0	23966.	-29.4	-34.0	64.	261.8	47.5
350.0	27044.	-37.4	-47.1	35.	269.2	42.5
300.0	30466.	-46.9			259.4	46.2

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

SIATION ALTITUDE 4047.27 FEET MSL
15 FEB. 80 1600 HRS MST
ASCENSION NO. 11

SIGNIFICANT LEVEL DATA
04401800 11
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 7

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
874.8	4047.3	17.3	1.7	35.0
850.0	4847.6	13.4	.4	41.0
770.2	7535.6	5.6	-2.0	58.0
721.6	9272.9	.6	-1.9	83.0
700.0	10072.2	-1.8	-2.5	95.0
647.2	12110.3	-5.6	-6.7	93.0
629.0	12846.0	-5.6	-13.6	53.0
602.4	13955.4	-7.9	-17.0	48.0
567.8	15457.2	-11.5	-20.3	48.0
542.4	16607.8	-13.1	-17.4	70.0
517.4	17785.6	-15.4	-19.9	68.0
500.0	18631.7	-17.7	-20.7	77.0
485.2	19360.6	-19.2	-20.2	92.0
477.4	19765.7	-20.0	-22.7	79.0
461.8	20573.5	-21.9	-25.6	86.0
431.4	22212.3	-25.1	-30.4	81.0
400.0	24003.6	-29.4	-35.5	55.0
387.8	24723.4	-30.7	-40.5	38.0
374.0	25572.9	-32.6	-43.3	33.0
353.6	26862.8	-36.6	-45.8	47.0
333.6	28130.5	-40.2	-44.3	64.0
327.2	28614.5	-41.4	-45.9	61.0
300.0	30531.8	-46.7	-49.2	70.0
260.4	33573.8	-54.0		
250.0	34434.4	-54.5		
200.0	39165.7	-52.3		
174.8	42023.4	-53.4		

STATION ALTITUDE 4047.27 FEET MSL
15 FEB. 80 1600 HRS MST
ASCENSION NO. 11

UPPER AIR DATA
0440180011
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 8

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4047.3	874.8	17.3	1.7	35.0	1046.1	668.9	210.0	4.9	1.000264
4500.0	860.7	15.1	1.0	38.4	1037.2	662.4	215.8	6.0	1.000261
5000.0	845.3	13.0	.4	42.0	1026.3	655.9	220.0	7.3	1.000258
5500.0	829.9	11.5	.0	45.1	1012.8	650.2	222.9	8.7	1.000254
6000.0	814.8	10.1	-.4	48.3	999.5	644.5	225.1	10.0	1.000251
6500.0	800.0	8.6	-.8	51.5	986.5	638.8	227.1	10.4	1.000247
7000.0	785.9	7.2	-1.4	54.6	973.8	633.1	234.2	10.5	1.000244
7500.0	771.2	5.7	-2.0	57.8	961.0	627.4	233.4	9.9	1.000240
8000.0	756.9	4.3	-1.9	64.7	947.9	621.7	242.6	8.7	1.000236
8500.0	742.8	2.8	-1.7	71.9	935.1	616.1	245.9	8.4	1.000232
9000.0	729.0	1.4	-1.4	79.1	922.5	610.4	246.6	8.8	1.000228
9500.0	715.4	-.1	-2.1	86.4	910.1	604.7	240.5	10.7	1.000224
10000.0	701.9	-1.6	-2.4	93.9	897.9	602.9	240.0	13.4	1.000220
10500.0	688.6	-2.6	-3.4	94.6	884.4	601.6	243.5	16.5	1.000217
11000.0	675.5	-3.6	-4.4	94.1	870.9	600.4	244.6	19.9	1.000213
11500.0	662.6	-4.6	-5.5	93.6	857.5	599.2	245.5	23.6	1.000210
12000.0	650.0	-5.6	-6.5	93.1	844.4	597.9	250.9	24.7	1.000208
12500.0	637.5	-5.7	-9.9	71.8	832.9	597.7	255.2	25.2	1.000206
13000.0	625.2	-5.9	-14.1	52.3	814.1	597.2	255.5	24.8	1.000202
13500.0	613.2	-7.0	-15.3	50.1	801.6	596.0	256.7	25.4	1.000198
14000.0	601.3	-8.0	-17.1	48.0	789.3	594.7	241.3	26.5	1.000194
14500.0	589.6	-9.2	-18.2	48.0	777.5	593.2	245.8	26.8	1.000191
15000.0	578.1	-10.4	-19.3	48.0	765.8	591.8	250.1	27.1	1.000187
15500.0	566.8	-11.6	-20.1	48.8	754.2	590.4	254.5	27.4	1.000185
16000.0	555.7	-12.5	-19.7	58.4	741.3	589.0	257.8	28.0	1.000183
16500.0	544.7	-13.0	-17.5	67.9	728.5	626.8	257.5	29.0	1.000171
17000.0	533.9	-13.9	-19.2	69.3	716.7	627.6	259.9	29.9	1.000168
17500.0	523.4	-14.8	-19.3	68.5	705.1	626.4	259.9	30.7	1.000165
18000.0	512.9	-16.0	-20.1	70.3	694.2	625.0	258.3	31.6	1.000162
18500.0	502.7	-17.3	-20.6	75.6	683.9	623.4	257.8	33.2	1.000159
19000.0	492.8	-18.4	-20.4	84.5	673.1	622.0	257.8	34.7	1.000157
19500.0	482.8	-19.5	-21.0	87.7	662.1	620.8	257.5	36.1	1.000154
20000.0	472.8	-20.6	-22.9	81.0	651.8	619.4	258.6	36.2	1.000151
20500.0	463.2	-21.7	-23.5	85.4	641.3	618.0	255.8	36.1	1.000148
21000.0	453.7	-22.7	-25.3	79.5	630.7	616.7	253.5	36.2	1.000145
21500.0	444.4	-23.7	-27.3	71.9	620.2	615.5	251.2	36.3	1.000142
22000.0	435.2	-24.7	-29.5	64.2	609.9	614.2	248.4	36.2	1.000139
22500.0	426.2	-25.8	-31.2	60.0	600.0	612.8	245.5	36.2	1.000136
23000.0	417.3	-27.0	-32.6	58.4	590.4	611.3	246.1	36.1	1.000134
23500.0	408.6	-28.2	-34.1	56.7	580.9	609.8	247.7	35.9	1.000132

STATION ALTITUDE 4047.27 FEET MSL
13 FEB. 60 1600 HRS MST
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UPPER AIR DATA
04401[illegible]
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GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 8 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	400.1	-29.4	-35.5	55.0	571.6	606.3	250.0	37.9	1.000129
24500.0	391.6	-30.3	-38.7	43.4	561.6	607.2	252.3	40.6	1.000126
25000.0	383.3	-31.3	-41.3	36.4	552.1	608.9	253.1	42.5	1.000124
25500.0	375.2	-32.4	-43.1	33.4	542.9	609.5	253.6	44.3	1.000122
26000.0	367.1	-33.9	-43.3	37.6	534.5	612.6	253.4	46.3	1.000120
26500.0	359.2	-35.5	-43.5	43.1	526.4	615.0	253.2	48.3	1.000118
27000.0	351.5	-37.0	-43.8	48.6	518.3	598.7	251.9	49.5	1.000116
27500.0	343.8	-38.3	-43.9	55.2	510.0	597.0	251.8	50.2	1.000114
28000.0	336.3	-39.7	-44.2	61.7	501.7	595.3	250.6	49.0	1.000113
28500.0	328.9	-41.1	-45.5	61.6	493.6	593.5	251.0	48.5	1.000111
29000.0	321.5	-42.5	-46.7	62.8	485.5	591.7	251.5	48.7	1.000109
29500.0	314.3	-43.8	-47.7	65.2	477.5	590.0	251.6	49.6	1.000107
30000.0	307.3	-45.2	-48.7	67.5	469.7	588.2	251.9	49.3	1.000105
30500.0	300.4	-46.6	-49.7	69.9	462.0	586.4	252.5	49.1	1.000103
31000.0	293.5	-47.8	-52.3	59.2**	453.8	584.8	253.2	48.9	1.000101
31500.0	286.8	-49.0	-55.2	47.7**	445.7	583.2	253.5	46.5	1.000100
32000.0	280.2	-50.2	-58.5	36.2**	437.6	581.7	253.9	43.9	1.000098
32500.0	273.7	-51.4	-62.5	24.7**	430.1	580.1	251.8	43.8	1.000096
33000.0	267.4	-52.6	-67.1	13.2**	422.5	578.5	249.8	44.2	1.000094
33500.0	261.3	-53.8	-82.1	1.7**	415.0	577.0	249.3	46.8	1.000092
34000.0	255.2	-54.2			406.1	576.4	249.7	49.4	1.000090
34500.0	249.2	-54.5			397.0	576.1	252.3	52.2	1.000088
35000.0	243.4	-54.2			387.4	576.4	254.6	55.2	1.000086
35500.0	237.7	-54.0			377.9	576.7	257.3	58.8	1.000084
36000.0	232.2	-53.8			368.7	577.0	259.1	62.5	1.000082
36500.0	226.8	-53.5			359.8	577.3	257.8	66.1	1.000080
37000.0	221.5	-53.3			351.0	577.6	256.4	69.4	1.000078
37500.0	216.3	-53.1			342.5	577.9	254.3	71.6	1.000076
38000.0	211.3	-52.8			334.1	578.2	253.0	73.1	1.000074
38500.0	206.4	-52.6			326.0	578.5	252.8	73.4	1.000073
39000.0	201.6	-52.4			318.1	578.9	252.4	74.3	1.000071
39500.0	196.9	-52.4			310.7	578.8	251.8	75.7	1.000069
40000.0	192.3	-52.6			303.8	578.5	251.4	75.7	1.000068
40500.0	187.8	-52.8			297.0	578.3			1.000066
41000.0	183.5	-53.0			290.3	578.0			1.000065
41500.0	179.2	-53.2			283.8	577.8			1.000063
42000.0	175.0	-53.4			277.5	577.5			1.000062

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

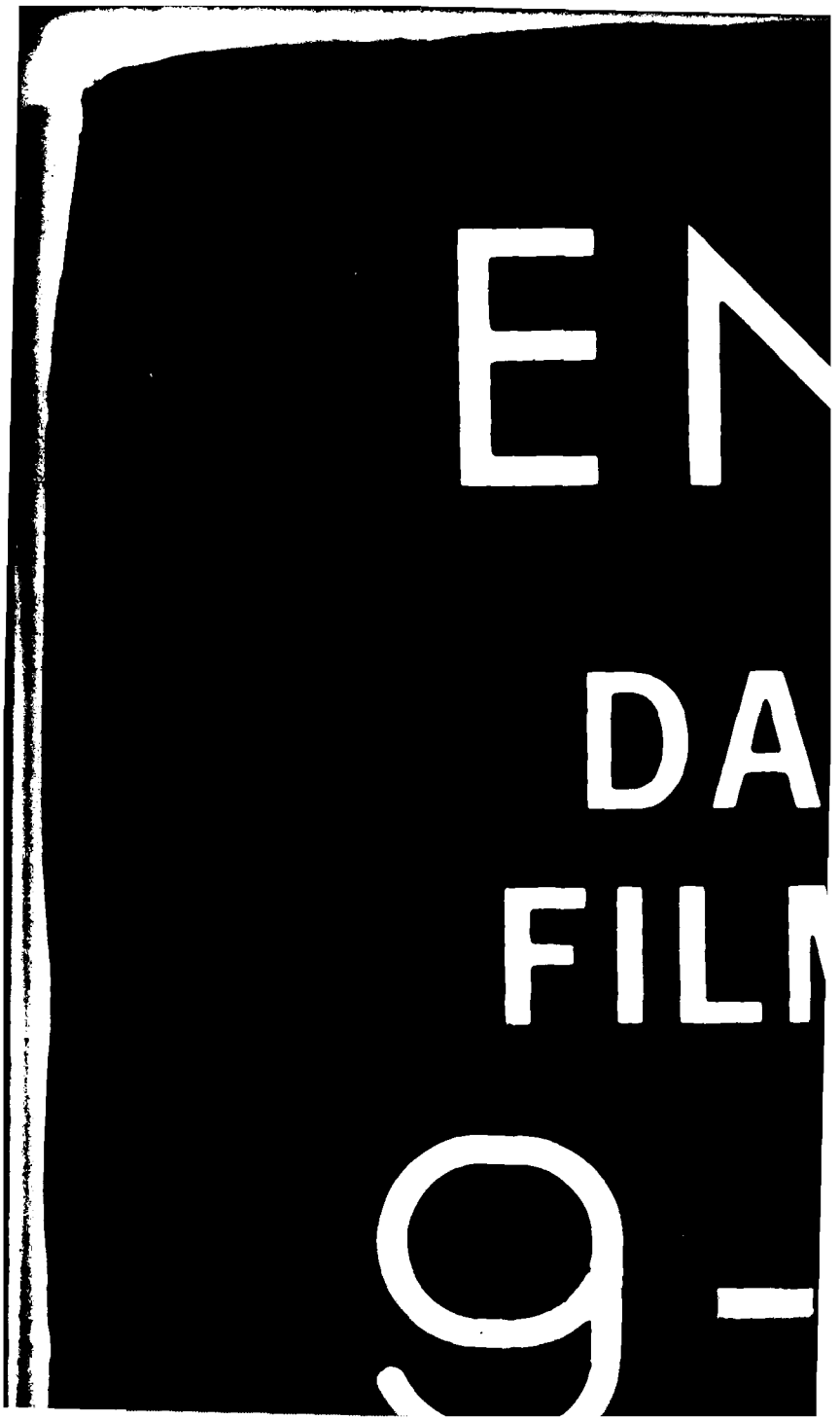
STATION ALTITUDE 4047.27 FEET MSL
13 FEB. 80 1600 HRS MST
ASCENSION NO. 11

MANDATORY LEVELS
0440180011
LC-37

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 9

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS
850.0	4844.	13.4	.4	41.	218.9	6.9
800.0	6504.	8.6	-.8	51.	229.2	10.4
750.0	8240.	3.6	-1.7	68.	245.4	8.2
700.0	10062.	-1.8	-2.5	95.	245.9	13.8
650.0	11986.	-5.6	-6.5	93.	239.0	24.7
600.0	14041.	-8.1	-17.2	48.	241.8	26.7
550.0	16238.	-12.6	-18.1	63.	257.7	26.5
500.0	18606.	-17.7	-20.7	77.	258.1	33.6
450.0	21167.	-23.1	-26.1	76.	252.6	36.2
400.0	23964.	-29.4	-35.5	55.	250.0	37.8
350.0	27047.	-37.2	-43.8	50.	251.8	49.7
300.0	30472.	-46.7	-49.8	70.	252.5	49.1
250.0	34361.	-54.5			251.9	51.7
200.0	39073.	-52.3			252.2	74.7
175.0	41900.	-53.4				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